## DECLARATION AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHODS OF TREATING SICKLE CELL DISEASE

the specification of (check one)	of which:			
	is attached	hereio.		
	was filed or	n		as
	Application Serial I	No. April 6, 2001		
	and was amended _		(if app	plicable)
I hereby state that including the claim	I have reviewed and und ns. as amended by any am	dersiand the contents of a endment referred to abou	the above-ident ve.	ified specification,
l acknowledge the a to be material to p	luty to disclose to the U.S. atentability as defined in	Patent and Trademark ( Title 37. Code of Federal	Office all inform Regulations, S	nation known to me lection 1.56.
365(b) of any fore International Appl	gn priority benefits under f eign application(s) for pat lication which designated identified below any fore cation having a filing date	ient or inventor's certific Lat least one country of Jon application for patel	ate, or Section her than the Ui nt or inventor's	nited States, listed certificate, or PCT
Prior Foreign Appl	lication(s)		Priorit	y Claimed
<u>Number</u>	Country	<u>Filing Date</u>	<u>Yes</u>	<u>No</u>
N/A				
			<del></del>	

Declaration and Power of Attorney		Page 2
I hereby claim the benefit under Titl provisional application(s) listed below	e 35. United States Co ::	de, Section 119(e) of any United State
Provisional Application No.	Filing Date	<u>Status</u>
N/A		
I hereby claim the benefit under Title Application(s), or Section 365(c) of any listed below. Insofar as this application is in any such prior Application in the mo- Code, Section 112, I acknowledge the du all information known to me to be ma Regulations, Section 1.56, which became is and the national or PCT international for	PCT International Applications substituted by the finite provided by the first to disclose to the Uniterial to patentability as available between the filling date of this application.	lication(s) designating the United State bject matter in addition to that disclose, rst paragraph of Title 35. United State ited States Patent and Trademark Official defined in Title 37, Code of Federalling date(s) of such prior Application(station:
Application Serial No.	Filing Date	<u>Status</u>
N/A		

## And I hereby appoint

John P. White (Reg. No. 28,678); Christopher C. Dunham (Reg. No. 22,031); Norman H. Zivin (Reg. No. 25,385); Jay H. Maioli (Reg. No. 27,213); William E. Pelton (Reg. No. 25,702); Robert D. Katz (Reg. No. 30,141); Peter J. Phillips (Reg. No. 29,691); Wendy E. Miller (Reg. No. 35,615); Richard S. Milner (Reg. No. 33,970); Robert T. Maldonado (Reg. 38,232); Paul Teng (40,837); Richard F. Jaworski (Reg. No. 33,515); Elizabeth M. Wieckowski (Reg. No. 42,226); Pedro C. Fernandez (Reg. No. 41,741); Gary J. Gershik (Reg. No. 39,992); Jane M. Love (Reg. No. 42,812); Spencer H. Schneider (Reg. No. 45,923) and Raymond A. Diperna (Reg. No. 44,063).

and each of them, all c/o Cooper & Dunham LLP. 1185 Avenue of the Americas, New York, New York 10036, my attorneys, each with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, to transact all business in the Patent and Trademark Office connected therewith and to file any International Applications which are based thereon under the provisions of the Patent Cooperation Treaty.

Declarat	ion an	d P	ower of Attorney			Pag	ge 3
Please ad	idress	all	communications, and	d direct all telep	hone calls.	regarding this application to:	
	John	P.	White		Reg. No.	28,678	
I. N	185 Av ew You	rent rk, j	Dunham LLP ue of the Americas New York 10036 78-0400				
made on in the knowled or both, ur	forma dge the nder Se	non it wi ectio	and belief are believe Ilful false statements	ed to be true: an s and the like so of the United Sta	d further th made are p tes Code at	dge are true and that all states at these statements were made punishable by fine or imprison nd that such willful false states hereon.	witi meni
Full name ( first joint ti	of sole nvento	or r	Robert H. DeBe	llis			-
Inventor's s	signatu	re_					-
Citizenship	USA			Date of s	ignature_		-
Residence_	356	Win	dsor Road, Engl	lewood, NJ	07631		•
			same as resider				
							•
Full name of inventor (if c			Bernard F. Erla	nger			
inventor's si	gnatur	e					
Ciuzenship_	USA			Date of s	ignature_		
Residence	163-1	5 1	5th Drive, Whi	testone, Ne	w York 1	1357	
Post Office A	ddress		same as reside	ence			
	-		· · · · · · · · · · · · · · · · · · ·			**************************************	
full name of ) nventor (if ar	ioint 1y)						

Citizenship\_\_\_\_\_\_\_Date of signature\_\_\_\_\_\_

Residence\_\_\_\_\_

Post Office Address\_\_\_\_\_

Inventor's signature\_\_\_\_\_

Applicant or Pater	tee:	:	: _	_]	Rol	be:	rt	t	I	H	•	]	De	B	e 1	1	ĹŚ	3	e	t	a	1	•	_	_								_								у'						
Serial or Patent M			_						_						_	_			_	_	_		_				_									Do	c	k	et	:	No	:	ئے	ŞI	15	7	M
Filed or Issued: _											_	_		_	_	_		_	_		_	_		_	_	_	_	_	_				_	_	_	_	_	_		_		_				_	_
Title of Invention	or	P	Pě	'aı	cei	nt	:	-		<u> </u>	E	T	HO	)D;	<u>s</u> _	<u>U</u>		T	K.	<u>:</u> A	7.7	<u>T</u>	N	G	_	<u>S</u>	1	<u>C</u>	K.	LE	_(	Έ	L	<u>L</u>	D.	<u>LS</u>	E/	\S	E			_		_			_
								-		_	_	_		_		_			-	_	_	_	_	_	_		_	_	_		_	-	_				_		_						-	-	_
					IFI																																										
	SMA																																	E)													
		A	A	AN	ND	§ 1	L.	. 2	27	1(	d	1)		-	N	N	P	R	Œ	Ί	T	(	OE	R	G/	41	N	I	Z	AΤ	IC	N															
I hereby declare torganization ident	hat ifie	I ed	I d	:	am be l	ar lov	n w:	:	of	fi	f	i	ci	.a	1	eı	nţ	٥٥	W	21	re	d		t	0	)	а	ıc	t	c	n	t	e	ha	<b>a</b> 1	f	0	£	t	h	e	n	on	ıp	r	of	i
Name of Organizati	on:		_T	Th	he	Tı	ru	18	st	t e	2	25	3	01		<u> </u>	1	u	nl	i	a	_1	Uı	n	i	V	<u>e:</u>	r	s	it	<u>y</u> _	i	D.	t	he	<u>.</u>	Ci	t	у	0	f	N	ev	J_	Y	<b>O</b> 1	<u>:k</u>
Address of Organiz	atio	on	n:	:		l 10 Vew																					W	e	Si	<u> </u>	11	6	ti	<u>n</u>	St	r	26	t	_{	<u>.</u>	Bı	<u>-</u>	ac	lv.	7a	<b>y</b>	_
TYPE OF ORGANIZATI	ON:																																														
X UNIVERSITY	OR (	O	ОТ	TF	HER	R 1	ΤN	NS	37	רי	T	rı	IT	T	) N	•	)F	•	H	rc	;H	Œ	R		E	D	U	IC	Ά	TI	0	N															
TAX EXEMPT																																	6	(	J.	s.	С		!	§ §	50	01	(a	a )	)	а	n
501(c)(3)																																															
NONPROFIT						IC	(	O)	R		E	D	U	CA	T	0	N	A]	_	U	N	DI	EI	R	:	S	T	Ά	T	UT	Έ	(	)F	•	SI	A'	ΓΕ		0	F	T	HE	Ξ	U	N:	ľ	E
STATES OF			IC	CA	A																																										
NAME OF ST		-	.=		<del></del>					_	_		_		_				_				_	_	_	_					_																
CITATION O								- V	<u></u>	_	77	27	-	177	770	-	_	Ŧ	NT	- E	· D	NT	A 1	<u> </u>	_	Ď.	Ë	17	-	NTI I	=	c	E	D۲	7 Y	re		~	תר	F	2	۲	T T		c	_	
WOULD QUAL §§501(a) a																																											U	• •	Э.	٠.	•
WOULD QUAL																																											OF	٠,	<b>S</b> 1	ГΑ	T
OF THE UNI	CED S	SI	ST	TΑ	ATE	ES	0	)F	7	A	77	1E	R	I	Ά	]	F		L	00	À	T	E	D		I	N		T	HE	Į	JN	I	TI	ED	S	T	ΑŢ	Έ	S	0	F	A	M	EI	ξI	C
NAME OF ST							_	-			_	_	•				_						_				_				_																
CITATION O	STA	ΆŢ	AT	TU	JTE	:				_		_								_						_	_				_																
																																								_							
I hereby declare t	hat	t	th	:he	e 1	no	יתי נחי	ıΡ	r	0	1	1	t.		r	36	מו	1	2 2	ıt r	1	01	n		1	d.	e	n	ıt /	11	:1(	ec	! : _	а 	bo -	V	? 	q	u a	3 L	.1.1	[]	es	s 	a 	ıs .:	_ ;
nonprofit organiza reduced fees under	E1011	n 10	6	a.	.s	ae	2 I 3 /\	[] , 1	LN L (	16 '~	9	3	7	LD	,	) / 	(1	, '		ť,	. I	(. i ←	h	. :	3 1	۱ .		7 ,	) ( ) Y	e) ∙A	n +.	ī	0	T h	P	uı	: p	0.	se	:S		21	: > m	p	ay i t	71 -1	n;
METHODS OF																								•	•		- 6	50			_		_		-		. •				<b>-</b> 11	•	- • •		• •	-	٠.
																			_		<u></u>	_		_		_	_	_	_			_	_	_		_	_			_		_					
by inventor(s) Ro	bert	t	F	H	. I	De]	Вє	e.	1.	1:	i	s	_6	:t	ě	1	•		_	_	_	_	_						_					_					_								
described in:																																															
					_										_																																
the specifi	cati	10	LO1	on : -	ı f	11	. е	d	1	h	16	ì	e	Wi	.t	1		£		_	تى																										
application patent no.	ser	rı	. 1	гą	11	110	٠ ز			<del>-</del> ;	٠,			00	1	-	-	Ľ	<b>L</b> 1	. e	u	-		_		_	_								_	_				_		-			_	_	
patent no.								-		*	. :	. 3	ا ی			_				_	_			_		_	_		-				-					_				-			_	_	
I hereby declare th	at r	ri	ri:	ig	ght	s	u!	ın	d	e	r	•	c	ວກ	ti	a	c	t	С	r		l a	1W	J	h	ıa	3 1	<i>7</i> €	е	be	ee	n	С	01	nν	ey	e	d	t	0	а	n	i	re	en	na	i
with the nonprofit	orga	an	ın	ni.	.za	ti	lo	מו	1	W	σí	t	h	1	e	38	r	d	t	0	•	t!	he	e	•	a	b	0	V	e	i	ie	n	ti	f	ie	ď	i	n	ve	en	t	iο	n	•		
If the rights held	by t	th	hε	ıe	nc	oni	pr	r	o:	f	i	t	o	r	ga	n	iz	ze	t	i	or	1	а	ı	·e	•	п	ıc	٥t	e	x	c ]	u	s	ίv	e	e	ac	ch		in	d:	iv	ì	ďι	ıa	1
concern, or organia	atio	on	on	n i	kn	ow	νn	1	t	O	)	h	a١	ve	7	i	gl	h t	s		t	5	t	h	ıe	2	i	ir	ıν	eı	nt	i	on	1	is	1	i	s 1	t e	d	b	e.	lo	w	•	а	n
no rights to the in	renti	ic	io	on	n a	re	≥ ł	h	e.	1	d		bу	,	an	У	P	e	r	S C	n	,	(	O	tì	h	e	r	1	th	ar	ì	tł	1e	i	n١	<sub>re</sub>	n	tc	r	,	w	hο	) (	CC	่าน	1
not qualify as a	small	. 1	1	b	bus	sir	ne	2 5	SS	5		C	on	ıc	eı	n	1	u	ıd	e	r		3	7		С	: .	F	٠.	R.		§ :	١.	9	( d	);		0	r	ē	ì	n	on	p	r	) f	Ĺ
organization under	37 C	С.	١.:	. F	. R		1		9	(	e	<u>:</u> )	ぉ																																		
a <sub>vomo</sub> .		<u>.</u>			د	٠.					_			_			_			_		<u>.</u> .					£	٠		_	_	_	, L		_ ^	-				_	٠.	n -		<b>.</b> .			_
aNOTE: Separate v	erıf	I1 ;-	.16	re	a	st	.a	ıt	.e	:II	n∈ ⊩	eT	ı E	s :-	a	r	2	;	· e	q	u	11	r e		3 	. :	I -	r	0	m ←	e	a	in Fl	1	ρe ; -	r	5 C	ιΩ 	, ,+		. O1	.10	.e:	ΙÏ	ı,	n	1
organization havin entities. 37 C.F.R.						E	.0	)	ŧ	Cl	u	e		LT	V	÷ 7.	Ę	1	I	ı	ć	ı۷	e	: I	ľ	. 1	Lľ	18	5	Ľ	U		- [	16	r I		<b>3</b> }	Ė	2 L	us	>	á	3		o I	ıd	•
entitles. 3/ C.r.K.	31.	. 4	۷.	- /	•																																										
Name: N/A																																															
Address:							_	_			_	_			_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_			_			_	_	_	_	_	_
								_	_				_		_	_	_	_	_	_	_	_							_	_	_	_	_	_	_	_				_		_					_
	dual	7						_	_	-	_	_	_		_	~	_	_	_	_	$\overline{}$	_	_	_		_	_	_	_			_	17	_	_	_	_		_	$\overline{}$		_	ıi:	_		•	_

\*See Reverse

Small Entity/Nonprofit
Page -2-

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. 37 C.F.R. \$1.28(b)\*.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name of Person Signing	Michael J. Cl			
Title In Organization:	Executive Dire	ctor, Colum	bia Innovatio	on Enterprise
Address: Engineering			Oth Street &	Ansterdan
New York, Ne	W York 10027	<i>II</i>		
Signature:	Pine	10.4H	<u> </u>	
Date Of Signature:	•	04	05/01	
			7	

\*See Reverse